

CLAIMS

Claims 1-20: (cancelled)

Claim 21 (new): Equipment for the repair of asphalt surfaces comprising a single vehicle road repair system with means for supplying infrared heat to the surface to be repaired, means for storing and supplying hot new asphalt, means for storing and supplying a rejuvenation liquid, and means for storage and supply of gas for heating.

Claim 22 (new): Equipment according to Claim 21, in which the single vehicle is a truck which optionally is fitted at the rear with an infrared heater system that is adapted to be moved towards and away from the surface to be repaired.

Claim 23 (new): Equipment according to Claim 21 fitted with a hot box that contains replacement asphalt and optionally an adjacent tank for rejuvenation liquid wherein the hotbox residual heat is used to maintain the working temperature of the rejuvenation liquid.

Claim 24 (new): Equipment according to Claim 21, provided with a tow bar for towing a trailer-mounted compaction roller.

Claim 25 (new): Equipment according to Claim 21 in which the infrared heating system is hinged so that it may be folded up against the back of the truck.

Claim 26 (new): Equipment according to Claim 21, in which the vehicle is a tractor backhoe or wheeled or skid-steer loader and optionally wherein the attachment that forms the infrared heater is fixed to the dipper arm (of a backhoe loader) or the front loader quick change system (of a skid steer) so that it may be moved towards and away from the surface to be repaired.

Claim 27 (new): Equipment according to Claim 26, provided with an attachment fitted to the rear of the vehicle containing a hot box for new asphalt, an adjoining tank for rejuvenation liquid that uses the hotbox residual heat to maintain a good working temperature, and a spray lance for its application to the raked area.

Claim 28 (new): Equipment according to Claim 21 provided with a control system for the heater and optionally wherein the control system enables independent on/off control of each burner or set of burners within the heater.

Claim 29 (new): Equipment according to Claim 21 in which the heater blanket is made of Fecralloy®.

Claim 30 (new): A process for repairing damaged asphalt in which the damaged area to be repaired is heated using one or more LPG powered infrared heaters to a depth of 10 mm to 100 mm from the surface wherein the average heating temperature is from 50 to 200°C, and the heating is for from 5 to 20 minutes, once heated, the damaged area is raked and/or scarified, the rejuvenating liquid comprising emulsified oils high in aromatics with high levels of polar compounds is then applied to the raked and/or scarified area, the surface is then compacted, optionally, wherein, precoated chippings are added on hot rolled asphalt and compacted into the surface to give road texture, and the surface is allowed to cool and harden for at least one hour.

Claim 31 (new): A process according to Claim 30 in which the rejuvenating liquid contains from 30 to 80 parts by weight in total of a heavy paraffin distillation solvent extract and a heavy naphthenic distillate solvent extract, from 10 to 60 parts by weight of water, and from 1 to 5 parts by weight of the emulsifier.

Claim 32 (new): A process according to Claim 30 in which a topcoat of a sealer/binder is also applied and/or in which a dusting of fine aggregate is added to ensure good initial skid resistance.